

## REMARKS

Favorable reconsideration of this application in light of the following amendments and remarks is respectfully requested. No new matter has been introduced. Independent claims 1, 5, 7, 8, 11, 12, 14, 15, 18, 19, 20 have been amended to clarify that the primary and secondary are primary windings and secondary windings, respectively, of a transformer. For support in the specification, see Fig. 6.

### Rejection under 35 U.S.C. §102

Claims 1-20 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,057,714 (Andrys et al., hereinafter Andrys). Amended independent claim 1 is directed at a passive field effect transistor mixer that includes a balun. The balun includes a transformer having a primary winding and a secondary winding.

In contrast, Andrys discloses a mixer that includes an active RF balun that includes a common gate amplifier and a common source amplifier (see Andrys at col. 3, lines 34-38 and Fig. 1). This is very different from the passive mixer of amended claim 1, which requires a balun that includes a transformer having a primary winding and a secondary winding. In addition to requiring additional power and extra biasing circuitry, the balun in Andrys conducts current in only one direction, unlike the transformer of claim 1, which can act bidirectionally.

Since Andrys does not teach every element of amended independent claim 1, claim 1, as amended, is not anticipated under 35 U.S.C. §102(e) by Andrys and is allowable. Dependent claims 2-7 depend on and incorporate independent claim 1, and are allowable for the same reasons as discussed above with regard to claim 1, and are further allowable in view of the additional limitations set forth therein. Independent claims 8 and 15, and claims 9-14 and 16-20, which depend on and incorporate claims 8 and 15 respectively, require a transformer having a primary winding and a secondary winding, and are also allowable for the same reasons as discussed above with regard to claim 1, and are further allowable in view of the additional limitations set forth therein.

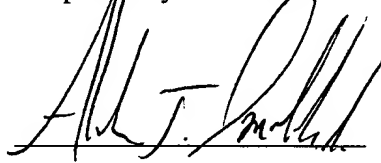
It is believed that the application is now in order for allowance and Applicant respectfully request that a notice of allowance be issued. If any extension is required,

applicant hereby petitions for same and requests that any extension or other fee required may be charged to deposit account number 19-4972.

If the Examiner has any questions as to the allowability of the currently pending claims or if there are any defects which need to be corrected, the Examiner is invited to speak to the Applicant's counsel at the telephone number given below.

DATE: June 26, 2003

Respectfully submitted



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